

CLAIMS

Claims 1-37 (Cancelled)

38. (New) A method for ringing a telephone connected to a routing system comprising:

- receiving a candidate call for said telephone;
- determining whether ringing said telephone for said candidate call exceeds a predetermined power limit;
- inserting said candidate call into a ring queue responsive to a determination that said ringing exceeds said power limit; and
- ringing said candidate call from said ring queue responsive to power being available to ring said telephone.

39. (New) The method of claim 38 further comprising:

- selecting one of a plurality of candidate calls in said ring queue responsive to ringing of another candidate call being terminated;
- determining whether ringing a telephone for said one of said plurality of candidate calls will exceed said predetermined power limit; and
- ringing said call responsive to a determination that ringing said telephone does not exceed said predetermined power limits.

40. (New) The method of claim 38 wherein said step of determining whether ringing said telephone exceeds said predetermined power limit further comprising:

- determining an amount of power required to ring said telephone;

comparing said amount of power required to power available for ringing;

and

determining said ringing exceeds said predetermined power limit is responsive to said amount of power required being greater than said power available.

41. (New) The method of claim 40 wherein said step of determining whether ringing said telephone exceeds said predetermined power limit comprises:
determining a total amount of power available for ringing; and
subtracting an amount of power required for ringing for each of a plurality of candidate calls being rung from said total amount of power available to determine said power available.

42. (New) The method of claim 38 wherein said predetermined power limit is a predetermined Ring Equivalent Number, said method further comprising:
determining said predetermined Ring Equivalent Number for said router.

43. (New) The method of claim 38 further comprising:
maintaining a ring state in memory for each telephone connected to said router.

44. (New) The method of claim 43 further comprising:
determining said ring state for said telephone receiving said candidate call responsive to receiving said candidate call; and
dropping said candidate call responsive to a determination that said ring state is RINGING.

45. (New) The method of claim 38 further comprising:
maintaining a timer for said candidate call in said ring queue.
46. (New) The method of claim 45 further comprising:
determining whether said candidate call has hung up responsive to said timer expiring.
47. (New) The method of claim 38 further comprising:
generating ring back tone voice packets responsive to receiving said candidate call; and
transmitting said ring back tone voice packets to a calling telephone of said candidate call.
48. (New) A program storage device readable by a machine, tangibly embodying a program of instructions executable by a processing system in a routing system to perform a method for call-limiting one or more candidate calls received by said routing system, said method comprising:
receiving a candidate call for said telephone;
determining whether ringing said telephone for said candidate call exceeds a predetermined power limit;
inserting said candidate call into a ring queue responsive to a determination that said ringing exceeds said power limit; and
ringing said candidate call from said ring queue responsive to power being available to ring said telephone.

49. (New) The method of claim 48 further comprising:
selecting one of a plurality of candidate calls in said ring queue responsive to ringing of another candidate call being terminated;
determining whether ringing a telephone for said one of said plurality of candidate calls will exceed said predetermined power limit; and
ringing said call responsive to a determination that ringing said telephone does not exceed said predetermined power limits.

50. (New) The method of claim 48 wherein said step of determining whether ringing said telephone exceeds said predetermined power limit further comprising:
determining an amount of power required to ring said telephone;
comparing said amount of power required to power available for ringing;
and
determining said ringing exceeds said predetermined power limit is responsive to said amount of power required being greater than said power available.

51. (New) The method of claim 50 wherein said step of determining whether ringing said telephone exceeds said predetermined power limit comprises:
determining a total amount of power available for ringing; and
subtracting an amount of power required for ringing for each of a plurality of candidate calls being rung from said total amount of power available to determine said power available.

52. (New) The method of claim 48 wherein said predetermined power limit is a predetermined Ring Equivalent Number, said method further comprising:

determining said predetermined Ring Equivalent Number for said router.

53. (New) The method of claim 48 further comprising:
maintaining a ring state in memory for each telephone connected to said
router.

54. (New) The method of claim 53 further comprising:
determining said ring state for said telephone receiving said candidate call
responsive to receiving said candidate call; and
dropping said candidate call responsive to a determination that said ring
state is RINGING.

55. (New) The method of claim 48 further comprising:
maintaining a timer for said candidate call in said ring queue.

56. (New) The method of claim 55 further comprising:
determining whether said candidate call has hung up responsive to said
timer expiring.

57. (New) The method of claim 48 further comprising:
generating ring back tone voice packets responsive to receiving said
candidate call; and
transmitting said ring back tone voice packets to a calling telephone of
said candidate call.

58. (New) An apparatus for ringing call received by a routing system comprising:

- means for receiving a candidate call for said telephone;
- means for determining whether ringing said telephone for said candidate call exceeds a predetermined power limit;
- means for inserting said candidate call into a ring queue responsive to a determination that said ringing exceeds said power limit; and
- means for ringing said candidate call from said ring queue responsive to power being available to ring said telephone.

59. (New) The apparatus of claim 58 further comprising:

- means for selecting one of a plurality of candidate calls in said ring queue responsive to ringing of another candidate call being terminated;
- means for determining whether ringing a telephone for said one of said plurality of candidate calls will exceed said predetermined power limit; and
- means for ringing said call responsive to a determination that ringing said telephone does not exceed said predetermined power limits.

60. (New) The apparatus of claim 58 wherein said means of determining whether ringing said telephone exceeds said predetermined power limit further comprising:

- means for determining an amount of power required to ring said telephone;
- means for comparing said amount of power required to power available for ringing; and

means for determining said predetermined power limit is exceeded responsive to said amount of power required being greater than said power available.

61. (New) The apparatus of claim 60 wherein said means for determining whether ringing said telephone exceeds said predetermined power limit comprises:
means for determining a total amount of power available for ringing; and
means for subtracting an amount of power required for ringing for each of a plurality of candidate calls being rung from said total amount of power available to determine said power available.

62. (New) The apparatus of claim 58 wherein said predetermined power limit is a predetermined Ring Equivalent Number, said method further comprising:
means for determining said predetermined Ring Equivalent Number for said router.

63. (New) The apparatus of claim 58 further comprising:
means for maintaining a ring state in memory for each telephone connected to said router.

64. The apparatus of claim 53 further comprising:
means for determining said ring state for said telephone receiving said candidate call responsive to receiving said candidate call; and
means for dropping said candidate call responsive to a determination that said ring state is RINGING.

65. (New) The apparatus of claim 58 further comprising:
means for maintaining a timer for said candidate call in said ring queue.

66. (New) The apparatus of claim 55 further comprising:
means for determining whether said candidate call has hung up responsive
to said timer expiring.

67. (New) The method of claim 48 further comprising:
means for generating ring back tone voice packets responsive to receiving
said candidate call; and
means for transmitting said ring back tone voice packets to a calling
telephone of said candidate call.